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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,144	12/29/2000	Steve Lewontin	730.39161X00	6775
20457	7590	01/27/2005	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			NGUYEN BA, PAUL H	
			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/750,144	LEWONTIN, STEVE	
	Examiner	Art Unit	
	Paul Nguyen-Ba	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice to Applicant

1. This action is responsive to Applicant's Supplemental Response, filed on 8/30/2004.
2. Claims 1-19 are currently pending. Claims 1 and 10 are independent claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Simon Hunt et al. ("Simon Hunt"), U.S. Patent Application Publication No. 2004/0049737.

Independent Claims 1, 10 and Claims 2, 3, 11-13

Simon Hunt discloses a method of representing a documents written in a markup language and stored in a mobile terminal adapted to receive said document and render said document on said display (see Abstract), the method comprising:

- *providing a virtual node tree describing the structure of the data types, with each one of the nodes in the virtual node tree respectively corresponding to one element of a specific data type in the document (see Fig. 2 and [0085]-[0090], [0140], [0146]-[0151] et seq. → DOM tree);*
- *for each one of the nodes in the virtual node tree, providing a data array including information identifying the relationship of the node to other nodes in the virtual node tree and a reference indicating the location of data corresponding to the node (see [0016], [0152]); and*
- *obtaining, by a set of software components in the mobile terminal, the data corresponding to the nodes using the reference included in the data array (see [0016], [0149] → Based on the nodes of the object tree, the QDOM generates an array of primitive data types for efficiently developing an optimized standard structure)*
- *wherein the data in the document is stored in a document block in memory (see [0146] and [0289]).*
- *wherein the document is written in XML or a variation of XML ([0014], [0050])*

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 6, 8, 9, 14, 16, 18, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simon Hunt et al. ("Simon Hunt"), U.S. Patent Application Publication No. 2004/0049737, U.S. Patent No. 6,567,815, in view of Call, U.S. Patent Application Publication No. 2002/0143521.

Claims 4 and 14

Simon Hunt discloses the method with respect to independent claims 1 and 10 above, but does not specifically disclose data arrays including a flags field.

However, Call discloses the use of flags to uniquely identify a selected rule in a manner tailored to the needs of the portion of the XML document (see Call [0362]) for the purpose of signaling a particular condition or status.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Simon Hunt with the teachings of Call to include the use of flag fields to uniquely identify a selected rule in a manner tailored to the needs of the portion of the XML document (see Call [0362]) for the purpose of signaling a particular condition or status.

Claims 6 and 16

Simon Hunt does not specifically disclose the method wherein a flag in the flags field and identifies the type of the node data. However, Call discloses that the header information for each node identifies the data type of the node (see Call [0368]; see also Figure 6).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Simon Hunt with the teachings of Call to include the use of flag fields to uniquely identify the data type of the node for the purpose of signaling a particular condition or status of the data.

Claims 8, 9, 18, 19

Simon Hunt discloses the method and mobile phone with respect to independent claims 1 and 10 as discussed above, but does not specifically teach whether the data arrays have a fixed or variable length. However, it was commonly known to those of ordinary skill in the art and would have been obvious at the time the invention was made to a person having ordinary skill in the art that data arrays can be either fixed or variable for the purpose of holding a preset or expanding number of objects. Furthermore, Call discloses fixed and variable length data as an addressable array to provide efficient data manipulation functions typically performed by hierarchical object oriented data systems, including systems conforming to the Document Object

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Model widely used for storing and manipulating XML and HTML character data (see Call [0016] and [0017]) for the purpose of compact data representation to preserve storage space (see Call [0013]). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Rubin with the teachings of Call to include the representation of a document structure written in a markup language, wherein the data arrays have a fixed or variable length for the purpose of compact data representation to preserve storage space.

7. Claims 5, 7, 15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simon Hunt et al. ("Simon Hunt").

Claims 5, 7, 15, 17

Simon Hunt further discloses an array indicating whether a node is a sibling or child (see [0149], [280]), but does not specifically teach indicating whether or not the node is the last sibling in a list of siblings and does not specifically teach a child index and a sibling index in the data array.

However, it was commonly known to those of ordinary skill in the art and would have been obvious at the time the invention was made to a person having ordinary skill in the art that the position of a node can be calculated by its arrangement in the data array relative to its siblings for the purpose of indicating whether or not the node is the last sibling in a list of siblings. It was also commonly known to those of ordinary skill in the art and would have been

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obvious at the time the invention was made to a person having ordinary skill in the art that a child and sibling index can be created using data arrays to further clarify the hierarchical standing of particular nodes.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 20020091835 A1 US-PGPUB 20020711 Lentini, Russell P. et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Nguyen-Ba whose telephone number is (571) 272-4094.

The examiner can normally be reached on 10 am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PNB


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER